Form PTO-1449

## Dept. of Commerce PATENT & TRADEMARK OFFICE

ATTY DOCKET,NO. D/96176D1D

| APPLICATION | NO. |
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INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)

**APPLICANT** Ram S. Narang et al.

| U.S. PA | TENT | DOCL | <b>IMENTS</b> |
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| T               |   | OCCUMENTS  |  | o   |
|-----------------|---|--|--|---|
| DOCUMENT NUMBER | PUBLICATION<br>DATE   | NAME OF PATENTEE   | CLASS  | SUB<br>CLASS  |
| 5,268,444       | 12/7/93   | Jensen et al.  | 528  | 125   |
| 4,086,209       | 4/25/78   | Hara et al.  | 260  | 49  |
| 5,753,783       | 5/19/98   | Fuller et al.  | 525  | 471   |
| 5,681,888       | 10/28/97  | Hideo Nomura et al.  | 524  | 496   |
| 3,455,868       | 7/15/69   | William J. D'Alessandro  | 260  | 38  |
| 5,336,720       | 8/9/94  | Susanna E. Richards et al.   | 525  | 78  |
| 4,435,496       | 3/6/84  | Walls et al  | 430  | 285   |
| 4,623,558       | 11/18/86  | Shiow C. Lin   | 427  | 44  |
| 4,667,010       | 5/19/87   | Sameer H. Eldin  | 528  | 125   |
| 5,438,082       | 8/1/95  | Helmer-Metzmann et al.   | 522  | 149   |
| 5,561,202       | 10/1/96   | Helmer-Metzmann et al.   | 525  | 471   |
| 3,914,194       | 10/21/75  | Smith  | 260  | 18R   |
| 4,110,279       | 8/29/78   | Nelson et al.  | 260  | 19R   |
| 3,367,914       | 2/6/68  | Herbert  | 260  | 52  |
| 2,125,968       | 8/9/38  | Theimer  | 260  | 153   |
| 4,739,032       | 4/19/88   | Jones  | +  | 230   |
| 4,448,948       | 5/15/84   | Tsubaki et al.   | 528  | 95  |
|                 | 5,268,444 4,086,209 5,753,783 5,681,888 3,455,868 5,336,720 4,435,496 4,623,558 4,667,010 5,438,082 5,561,202 3,914,194 4,110,279 3,367,914 2,125,968 4,739,032 | DOCUMENT NUMBER         PUBLICATION DATE           5,268,444         12/7/93           4,086,209         4/25/78           5,753,783         5/19/98           5,681,888         10/28/97           3,455,868         7/15/69           5,336,720         8/9/94           4,435,496         3/6/84           4,623,558         11/18/86           4,667,010         5/19/87           5,438,082         8/1/95           5,561,202         10/1/96           3,914,194         10/21/75           4,110,279         8/29/78           3,367,914         2/6/68           2,125,968         8/9/38           4,739,032         4/19/88 | DOCUMENT NUMBER         DATE         NAME OF PATENTEE           5,268,444         12/7/93         Jensen et al.           4,086,209         4/25/78         Hara et al.           5,753,783         5/19/98         Fuller et al.           5,681,888         10/28/97         Hideo Nomura et al.           3,455,868         7/15/69         William J. D'Alessandro           5,336,720         8/9/94         Susanna E. Richards et al.           4,435,496         3/6/84         Walls et al.           4,623,558         11/18/86         Shiow C. Lin           4,667,010         5/19/87         Sameer H. Eldin           5,438,082         8/1/95         Helmer-Metzmann et al.           5,561,202         10/1/96         Helmer-Metzmann et al.           3,914,194         10/21/75         Smith           4,110,279         8/29/78         Nelson et al.           3,367,914         2/6/68         Herbert           2,125,968         8/9/38         Theimer           4,739,032         4/19/88         Jones | DOCUMENT NUMBER         PUBLICATION DATE         NAME OF PATENTEE         CLASS           5,268,444         12/7/93         Jensen et al.         528           4,086,209         4/25/78         Hara et al.         260           5,753,783         5/19/98         Fuller et al.         525           5,681,888         10/28/97         Hideo Nomura et al.         524           3,455,868         7/15/69         William J. D'Alessandro         260           5,336,720         8/9/94         Susanna E. Richards et al.         525           4,435,496         3/6/84         Walls et al.         430           4,623,558         11/18/86         Shiow C. Lin         427           4,667,010         5/19/87         Sameer H. Eldin         528           5,438,082         8/1/95         Helmer-Metzmann et al.         522           5,561,202         10/1/96         Helmer-Metzmann et al.         525           3,914,194         10/21/75         Smith         260           4,110,279         8/29/78         Nelson et al.         260           3,367,914         2/6/68         Herbert         260           4,739,032         4/19/88         Jones         528 |

## FOREIGN PATENT DOCUMENTS

|    | COUNTRY | DOCUMENT NUMBER | PUBLICATION<br>DATE | NAME OF PATENTEE OR APPLICANT                    | TRANSLATION |
|----|---------|-----------------|---------------------|--|-------------|
| 94 | EPC     | 0-281-808       | 9/14/88             | Siemens Aktlengeseilschaft Berlin<br>und Munchen | Y/N<br>Y    |
| 97 | EPC     | 0 663 411 A1    | 7/19/95             | Yokoshima et al.                                 | Y           |

OTHER DOCUMENTS (Including Author (in CAPS), Title, Publication Date, Pages, etc.)

DALY, "Chloromethylation of Condensation Polymers Containing an Oxy-1,4-Phenylene Backbone," Polymers Preprints (1979) Vol. 20, No. 1, pp. 835-837

CAMPS, "Chloromethylstyrene: Synthesis/Polymerization, Transformations, Applications," JMS-REV. MACROMOL, CHEM. PH/\$. C22(3), 343/40/ (1982-1983

**EXAMINER** 

DATE CONSIDERED

Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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|                          | INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)   | APPLICANT                                   |                               |  |  |
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|                          |  | or (in CAPS), Title, Publication Date, Page |                               |  |  |
| 9+                       | TABATA, "Pulse Radiolysis Studies on the M   | Mechanism of the High Sensitivity           | of Chloromothylated           |  |  |
|                          | TABATA, "Pulse Radiolysis Studies on the Mechanism of the High Sensitivity of Chloromethylated Polystyrene as an Electron Negative Resist," 1984 pp. 287-288   |   |                               |  |  |
| 9+                       | Chloromethylstyrene " Polymer Propriets, 1988, pp. 543, 547  |   |                               |  |  |
| GH                       | HERGENROTHER "Poly(ordens alterna)" P. 040-047   |   |                               |  |  |
| 91                       | HAVENS, "Ethynyl-Terminated Polyanylates: Synthosis and Ohana Line 1997  |   |                               |  |  |
|                          | Science: Polymer Chemistry Edition, Vol. 22 (1984), pp. 3011-3025  HENDRICKS, "Flare, A Low Dielectric Constant, High Tg. Thermally Stable Poly(Arylene Ether) Dielectric for Microelectronic Circuit Interconnect Process Interesting Confliction (1984). |   |                               |  |  |
| Gi                       | I LICINDINIONS. FIRE A LOW HELECTRIC Conct   | oot Liet T. T                               | oly(Arylene Ether) Dielectric |  |  |
| MH                       | for Microelectronic Circuit Interconnect Proce<br>Thermomechanical Properties, and Thin-Film<br>Vol. 37, No. 1, March 1996, pp. 150-151  |   |                               |  |  |
|                          |  |   |                               |  |  |
| 97                       | ZUPANCIC, "Styrene Terminated Resins as 179  | nterlevel Dielectrics for Multichin         | Modules " 1001 pp. 170        |  |  |
| 10                       | PERCEC "Eurotional Bul   |   |                               |  |  |
| 9t                       | PERCEC, "Functional Polymers and Sequen Makromal Chem. 1984, pp. 1867-1880   |   |                               |  |  |
| H                        | PERCEC, "Functional Polymers and Sequent   | ial Conglymers by Phase Transfe             |                               |  |  |
|                          |  |   |                               |  |  |
| gt                       | PERCEC, "Functional Polymers and Sequent<br>Convenient Synthesis of p- and m-Hydrozym  | ial Copolymers by Phase Transfe             | er Catalysis 4. A New and     |  |  |
|                          |  |   |                               |  |  |
| 91                       | Thieme Publishers 2 00 0 0   | Metriyi Ether Free of Bis(chloron           | nethyl) Ether," 1979 Georg    |  |  |
| at                       | McKILLOP, "A Simple and Inexpensive Proce  | dure for Chloromethylation of Co            | 4-1- A 1                      |  |  |
|                          |  |   |                               |  |  |
| GL.                      | I 'L' LIVITOTINA. SVILDESIS OT INTERMADIATAE F   | or Production of Heat Device                | Polymers                      |  |  |
| H                        | (Chloromethylation of Diphenyl Oxide)," Zhurnal Prikladnoi Khimii, Vol. 40, No. 11, November, 1967, pp.  |   |                               |  |  |
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|                          | not in conformance and not considered. Include cop   | by of this form with next communication     | on to applicant.              |  |  |